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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,732	12/11/2001	Ikuo Tsukagoshi	SONY-30000	5777

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EXAMINER

TOPGYAL, GELEK W

ART UNIT	PAPER NUMBER
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2621

DATE MAILED: 10/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/014,732	TSUKAGOSHI ET AL.	
	Examiner	Art Unit	
	Gelek Topgyal	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: please delete "utlizing" and add --utilizing--. Appropriate correction is required.

Response to Arguments

2. Applicant's arguments filed 21 July 2006 have been fully considered but they are not persuasive.

Applicants present arguments in pages 7-9 in regards to independent claims 1, 12, 23 and 24. Applicants argue that in claims 1, 23 and 24, Aotake does not teach storing an encoded bitstream and then retrieving the encoded bitstream after a period of time. The applicants also argue that Aotake does not teach the newly added limitation of encoding a compressed domain bitstream "utilizing a coding scheme selected from a variety of coding schemes." Applicants argue the same limitations in claim 12 compared to claims 1, 23 and 24, but further argue that a "decoder for retrieving the encoded bitstream after a period of time" is not taught by Aotake.

In response, the examiner respectfully disagrees. The applicants themselves disclose in page 7 of their Amendment dated 21 July 2006, that Aotake teaches "An MPEG system stream output by the real-time encoder board is **stored in an MPEG file**". To further support the limitations of storing the encoded bitstream, Aotake teaches in col. 25, lines 31-50 of a Slip Recorder that records TV broadcast program that is "encoded by the MPEG1 real time encoder board 213 and encoded data obtained as a result of the encoding operation is **stored** in the hard disc 212".

In response to the arguments regarding a “decoder for retrieving the encoded bitstream after a period of time”, the examiner respectfully disagrees. Aotake teaches that the user has the ability to playback a recorded portion whenever the user desires. Fig. 17 and column 37, lines 13-25 clearly teaches that when the user desires to play a recorded portion (which has to be a certain period of time after recording, since one cannot play anything that has not been recorded), the system will “decode the MPEG system stream read”. Therefore, this limitation is clearly taught by Aotake.

In response to the newly added limitation of encoding a compressed domain bitstream “utilizing a coding scheme selected from a variety of coding schemes”, the examiner respectfully disagrees. Aotake meets the limitations of the broadly claimed limitation in Fig. 8, element 327 and col. 10, lines 18-32 where a user can select a recording mode from a group of recording modes. The domain bitstream can therefore be encoded in “coding schemes”. Therefore, the newly added limitation is clearly met by Aotake.

3. Furthermore, in response to applicant’s argument that the references fail to show certain features of applicant’s invention, it is noted that the features upon which applicant relies (i.e., “the timeshifting system accepts a variety of different input signal formats, including but not limited to, MPEG-2, MPEG-4, digital video, JPEG and Motion JPEG-200”) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

4. The applicant further argues in pages 8-10, that all dependent claims: Claims 2-11 which depend on independent claim 1, and claims 13-22 which depend on independent claim 12 are allowable because the applicant believes independent claims 1, 12, 23 and 24 are allowable.

In response, for the same reasons as discussed above in paragraph 1 in the rejection of independent claims 1, 12, 23 and 24, the dependent claims 2-11 and 13-22 also remain rejected.

5. The previous office action is copied below with modifications to further clarify the position of the examiner.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. **Claims 1, 3-5, 9-11, 12, 14-16, and 20-24** are rejected under 35 U.S.C. 102(e) as being anticipated by Aotake (US 6,411,771 B1)

Regarding claim 1, Aotake teaches a method that comprises:

encoding a compressed domain bitstream utilizing a coding scheme selected from a variety of coding schemes (Aotake teaches in col. 25, lines 31-50 of a Slip Recorder that records TV broadcast program that is “encoded by the MPEG1 real time encoder board 213 and encoded data obtained as a result of the encoding operation is **stored** in the hard disc 212”. Furthermore, Aotake meets the limitations of the broadly claimed “utilizing a coding scheme selected from a variety of coding schemes” in Fig. 8, element 327 and col. 10, lines 18-32 where a user can select a recording mode from a group of recording modes. The domain bitstream can therefore be encoded in “coding schemes”. Therefore, the newly added limitation is clearly met by Aotake);

storing the encoded bitstream (Aotake teaches in col. 25, lines 31-50 of a Slip Recorder that records TV broadcast program that is “encoded by the MPEG1 real time encoder board 213 and encoded data obtained as a result of the encoding operation is **stored** in the hard disc 212”.);

retrieving the encoded bitstream after a period of time (Aotake teaches that the user has the ability to playback a recorded portion whenever the user desires. Fig. 17 and column 37, lines 13-25 clearly teaches that when the user desires to play a recorded portion (which has to be a certain period of time after recording, since one cannot play anything that has not been recorded), the will “decode the MPEG system stream read”.); and

decoding the retrieved bitstream. (Fig. 5 and col. 8, lines 17-38 teach that a broadcast video programs can be encoded, stored, and then retrieved and then decoded at a later time. Aotake teaches that the user has the ability to playback a

recorded portion whenever the user desires. Fig. 17 and column 37, lines 13-25 clearly teaches that when the user desires to play a recorded portion (which has to be a certain period of time after recording, since one cannot play anything that has not been recorded), the system will "decode the MPEG system stream read".)

Regarding claims 3 and 4, Aotake teaches a picture evaluating circuit 130 during recording that calculates the complexity of the incoming stream by computing two parameters. The two parameters are then used by scene change detecting circuit 131 to detect a scene change, which then stores the index of the frame of the incoming stream into an index file to be used during reproduction (col. 19-20). Furthermore, during recording, the user can set the recording bit rate of the incoming stream (Fig. 8, 327). During retrieval, i.e. playback, the user has the ability to jump forward or backward by pressing index buttons 351 and 352 (Fig. 15) to jump between scenes. Therefore the period of time between storing (recording) and further retrieval (playback) depends on the index file, which further depends on the complexity and the recording bit rate of the program.

Regarding claim 5, Aotake teaches that the incoming stream can store both video and corresponding audio (col. 9 lines 32-38).

Regarding claim 9, Aotake teaches that retrieval of the program can begin at an indexed location by pressing index buttons 351 and 352 (Fig. 15). The index file contains pointers, which point to the location of the program with a corresponding index flag. Therefore the program retrieval can take place at the beginning of the next or previous scene (cols. 35-36).

Regarding claim 10, Aotake teaches in cols. 35-36, that when playback operation is selected by the user, a window as shown in Fig. 15 is displayed, and that when playback starts, it starts at the beginning of the recording point. Therefore, at start of the computer program to allow slip playback, the playback starts at the beginning of the recording (cols. 35-36).

Regarding claim 11, Aotake teaches in cols. 35-36, where a user has the ability to move the time slider to any portion of the recorded program by way of dragging the slider or by clicking on index buttons 351 and 352 (Fig. 15). When a user plays back a recorded program and chooses to move the reproduction to other parts of the program, the difference between several pointers defines a particular time delay, and the time delays between the pointers can be seen in Fig. 18 where the pointers in index file point to different locations within the stored program.

System claim 12, 14-16, and 20-22 are rejected for the same reasons as stated above in method claims 1, 3-5, and 9-11, respectively.

System claim 23 is rejected for the same reasons as stated above in method claim 1.

System claim 24 is rejected for the same reason as stated above in method claim 1, and furthermore Aotake teaches a memory unit 202 that stores instructions for performing the claimed methods (col. 8, lines 55-63).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 2 and 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Aotake (US 6,411,771) in view of Yang (US 5,270,829).

Regarding claim 2, Aotake teaches a system that allows a recorded program (stream) to be retrieved and further decoded, but fails to expressly teach that the period of time between the storing and retrieving of a stream is programmable.

In an analogous recording and reproducing art, Yang teaches a system that is capable of reserving a playback time of a recorded program. The system allows the user to program a start time for reproduction of a recorded broadcast program (col. 3, line 23 – col. 4, line 12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the programmable playback time as taught by Yang into Aotake's system to improve convenience so that the user can watch the recorded program at a desired time and the programmable playback time also functions as a reminder to the user of an unwatched recorded program.

Yang discloses the motivation to improve convenience on part of the user so that the user can watch the recorded program at a desired time (col. 5, line 55 – col. 6, line 5).

System claim 13 is rejected for the same reasons as stated above in method claim 2.

10. **Claims 6 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Aotake (US 6,411,771 B1) in view of Suzuki (US 6,148,135 A).

Regarding claim 6, Aotake teaches that the video and its' corresponding audio are recorded together onto the storage medium, but fails to teach that the audio and video inputs have separate time bases.

In an analogous art, Suzuki teaches a system that maintains separate time codes for audio and video streams (col. 4, line 57 – col. 7, line 17). The time stamps can be used during reproduction to allow for synchronization between the video and audio streams.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate maintaining separate time codes for audio and video streams as taught by Suzuki into Aotake's system to allow for only video, only audio or both audio and video to be recorded and reproduced and to further improve synchronization within the system.

System claim 17 is rejected for the same reasons as stated above in method claim 6.

11. **Claims 7, 8, 18 and 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Aotake (US 6,411,771 B1) in view of Fujinami (US 5,455,684).

Regarding claim 7, Aotake teaches a system that allows encoding of video and audio signals, but doesn't particularly point out that the video and audio streams are separately encoded, and then further multiplexed to be stored onto the storage medium.

In an analogous art, Fujinami teaches a system that takes in audio and video signals and encodes the streams separately, and then multiplexes to be stored on the storage medium (Fig. 11, and col. 11, lines 34–52).

Aotake teaches that several types of audio output modes can be selected by the user during storage (col. 36, lines 1-12), and since video is handled separately, the motivation to separate the audio and video is clear.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to encode streams separately and then multiplex the two streams and then stored on the storage medium as taught by Fujinami into Aotake's system in order to reduce crosstalk and interference.

Regarding claim 8, Aotake teaches a system that reads the stream on the storage medium and then decodes the video and audio stream, but fails to teach that that stream from the storage medium is de-multiplexed and further decoded separately.

In an analogous art, Fujinami teaches a system that allows a multiplexed stream on a storage medium to be retrieved, de-multiplexed, and then further decoded separately (Fig. 17 and col. 18, lines 20-48).

Aotake teaches that several types of audio output modes can be selected by the user during storage (col. 36, lines 1-12), and since video is handled separately, the motivation to separate the audio and video is clear.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to read a stream from a storage medium which is de-multiplexed to separate the audio and video streams, and then to decode them separately as taught by Fujinami into Aotake's system to reduce crosstalk and interference.

System claims 18 and 19 are rejected for the same reasons as stated above in method claims 7 and 8, respectively.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gelek Topgyal whose telephone number is 571-272-8891. The examiner can normally be reached on 8:30am -5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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10/4/2006


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